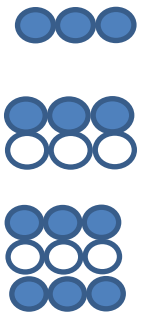
Hampshire Mathematics Team
Multiplication templates

One, ten, five derive…

3 x table

Multiplication and Division Facts



3

3+3=

3+3+3=

3+3+3+3=

3+3+3+3+3=

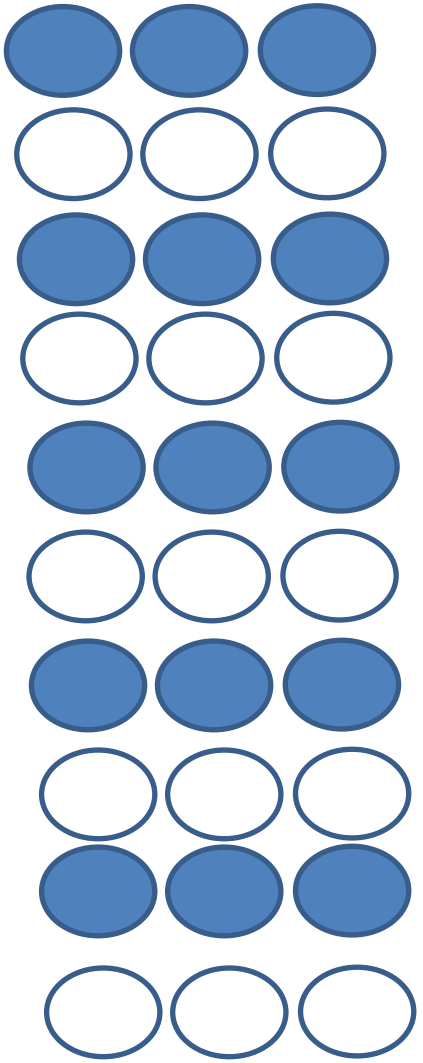
3+3+3+3+3+3=

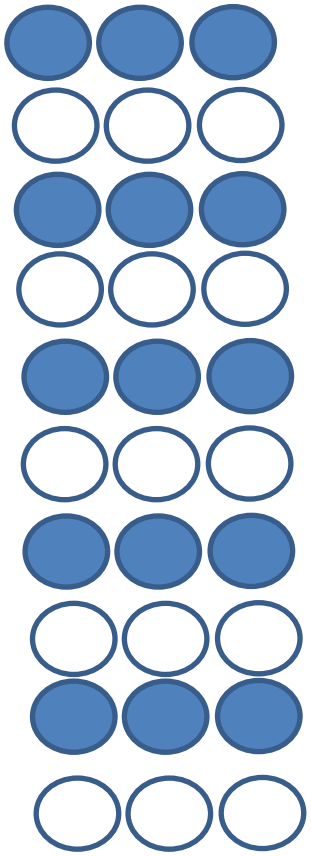
3+3+3+3+3+3+3=

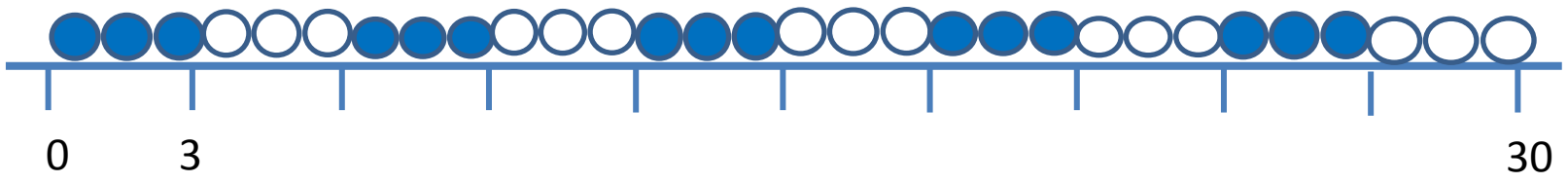
3+3+3+3+3+3+3+3=

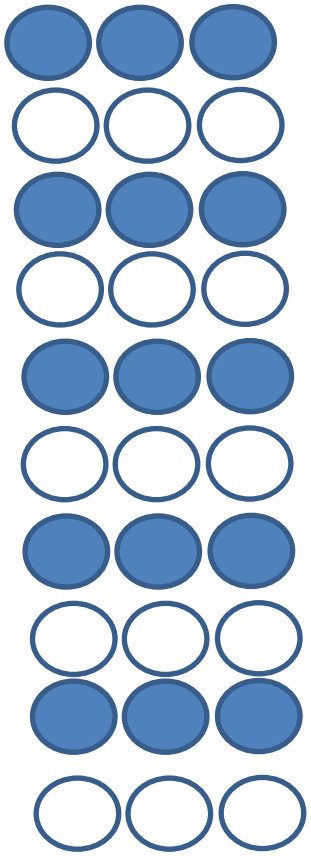
3+3+3+3+3+3+3+3+3=

3+3+3+3+3+3+3+3+3+3=

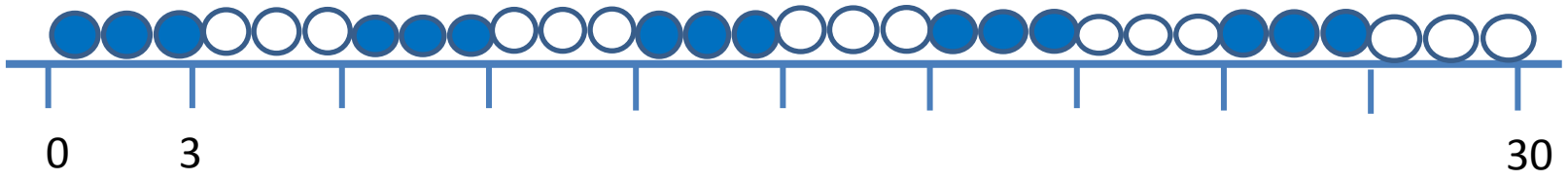




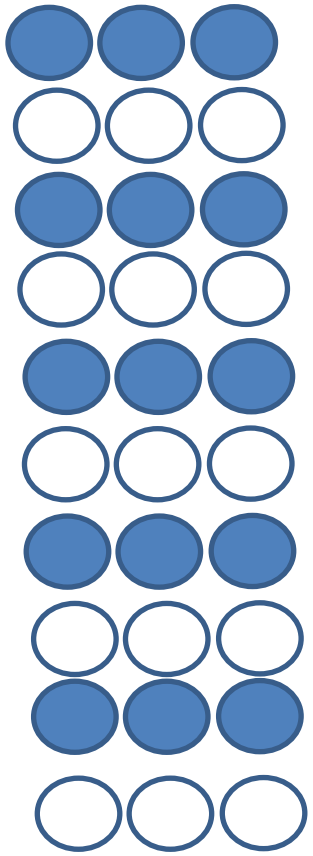

0
3
30



3 X1=
3 X2=
3 X3=
3 X4=
3 X5=
3 X6=
3 X7=
3 X8=
3 X9=
3 X10=

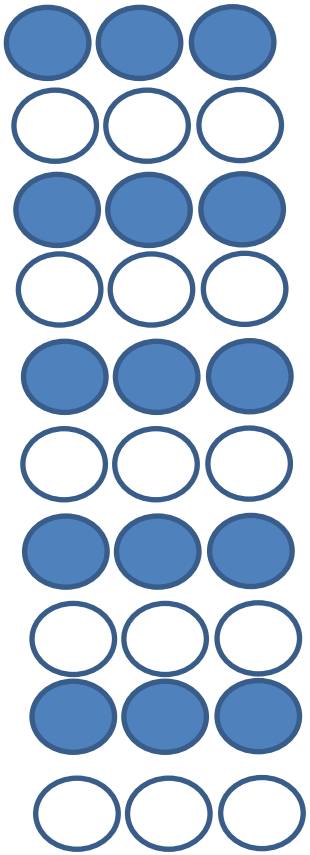


Counting in 3s, Multiples of 3



3	**3** X1=
3+3=	**3** X2=
3+3+3=	**3** X3=
3+3+3+3=	**3** X4=
3+3+3+3+3=	**3** X5=
3+3+3+3+3+3=	**3** X6=
3+3+3+3+3+3+3=	**3** X7=
3+3+3+3+3+3+3+3=	**3** X8=
3+3+3+3+3+3+3+3+3=	**3** X9=
3+3+3+3+3+3+3+3+3+3=	**3** X10=

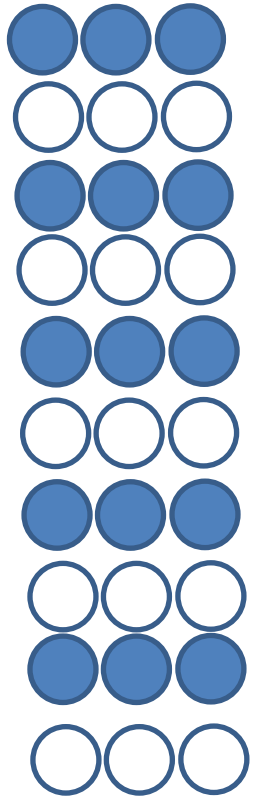
Multiples of 3



3 X1=
3 X2=
3 X3=
3 X4=
3 X5=
3 X6=
3 X7=
3 X8=
3 X9=
3 X10=

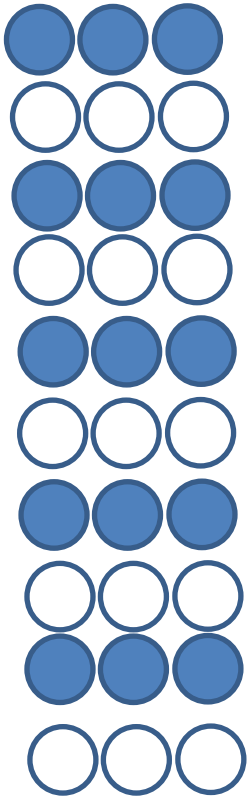
What is your favourite order for working out these linked facts?

How many groups of 3 in multiples of 3…?



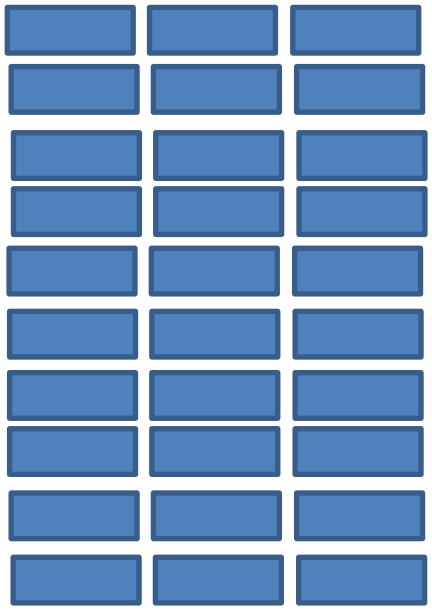
3	3**÷ 3**=
6	6**÷ 3**=
9	9 **÷ 3**=
12	12 **÷ 3**=
15	15 **÷3**=
18	18 **÷ 3**=
21	21 **÷ 3**=
24	24 **÷ 3**=
27	27 **÷3**=
30	30 **÷3**=

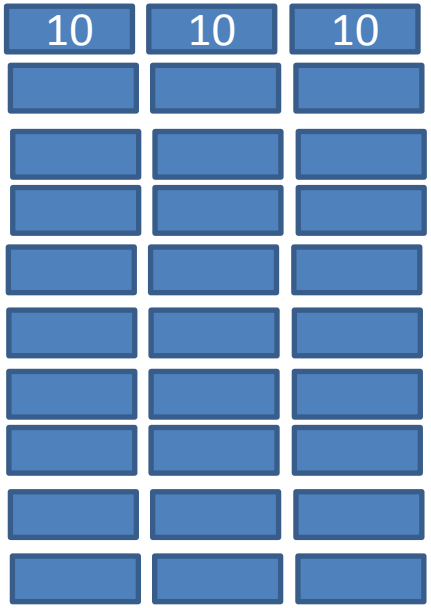
How many groups of 3 in any number…?



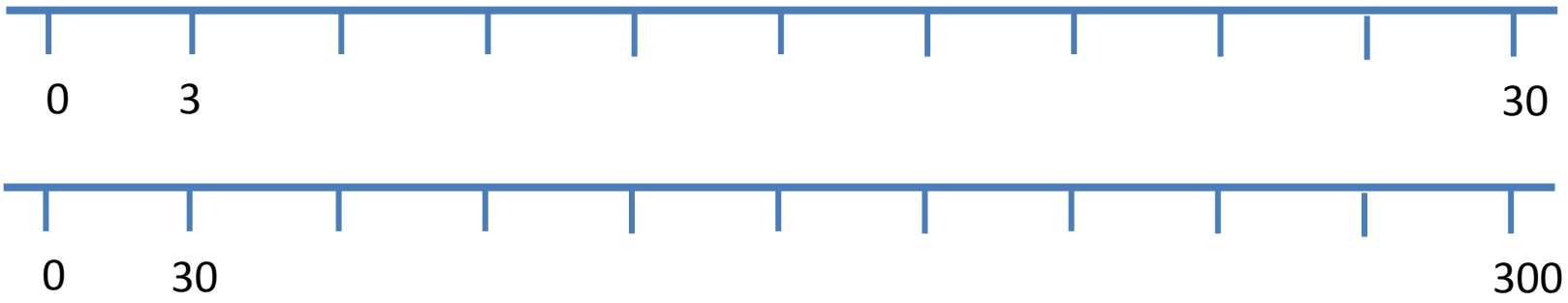
4	4 ÷ 3 =
7	7 ÷ 3 =
10	10 ÷ 3 =
13	13 ÷ 3 =
16	16 ÷ 3 =
19	19 ÷ 3 =
22	22 ÷ 3 =
25	25 ÷ 3 =
28	28 ÷ 3 =
31	31 ÷ 3 =

Multiples of 3, 30





3 X1=	30 x1=
3 X2=	30 x2=
3 X3=	30 x3=
3 X4=	30 x4=
3 X5=	30 x5=
3 X6=	30 x6=
3 X7=	30 X7=
3 X8=	30 X8=
3 X9=	30 X9=
3 X10=	30X10=



Dividing into groups of 3, 30

15 ÷ 3=
30 ÷ 3=

3÷ 3=
6 ÷ 3=

9 ÷ 3=
18 ÷ 3=

12÷ 3=
24 ÷ 3=

21÷ 3=
27 ÷ 3=

150 ÷ 30=
300 ÷ 30=

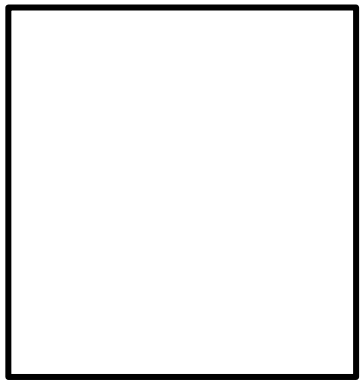
30 ÷ 30=
60 ÷ 30=

90 ÷ 30=
180 ÷ 30=

120÷ 30=
240 ÷ 30=

210 ÷ 30=
270 ÷ 30=

Array



Bar Model:

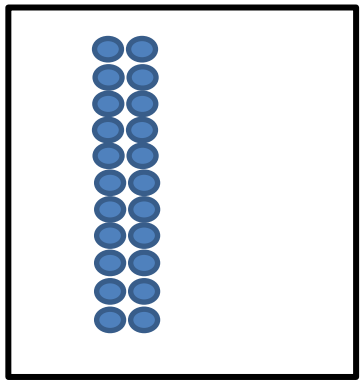
Number line:

Bar model:

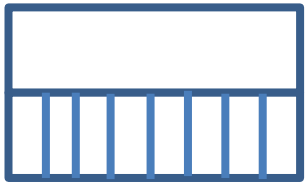
Number line:

3x8=

Array

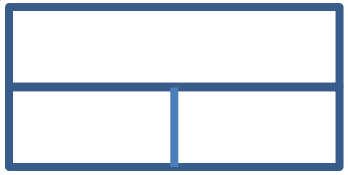


Bar Model:



Number line:

Bar model:



Number line:

200x8=1600

800x2=1600

0.2x 8=1.6

0.8x2=1.6

2/10 x8=16/10= 1 6/10

8/10 x2=16/10= 1 6/10

20x 8=160

80x2=160

8x2=16

Eg 2x8= 16

16 ÷2=8

16 ÷8=2

160 ÷2=80

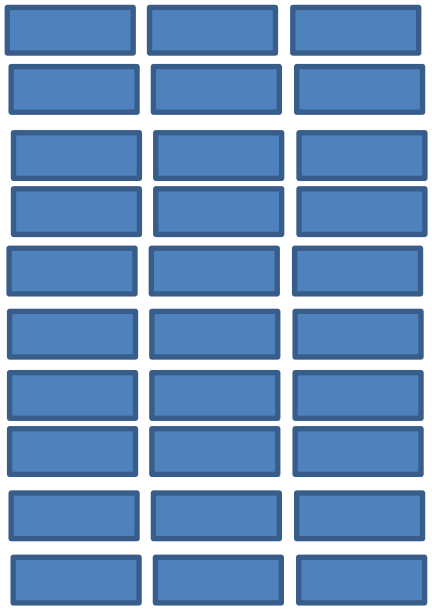
160 ÷8=20

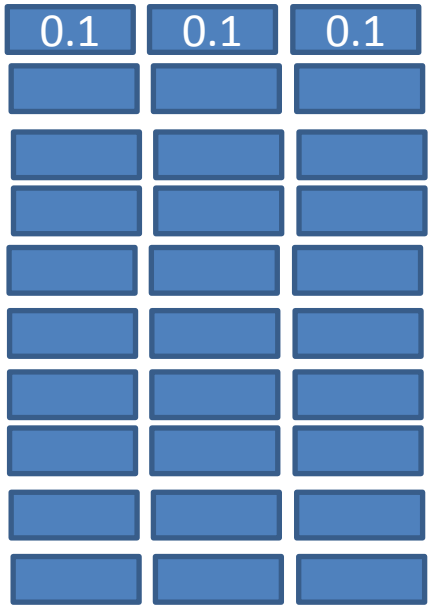
160 ÷20=8

160 ÷80=2

Which sets of related facts would be appropriate for **Y3**, **Y4**, **Y5**?
Could pupils adjust the number lines, bar models to match?
Links to fractions?

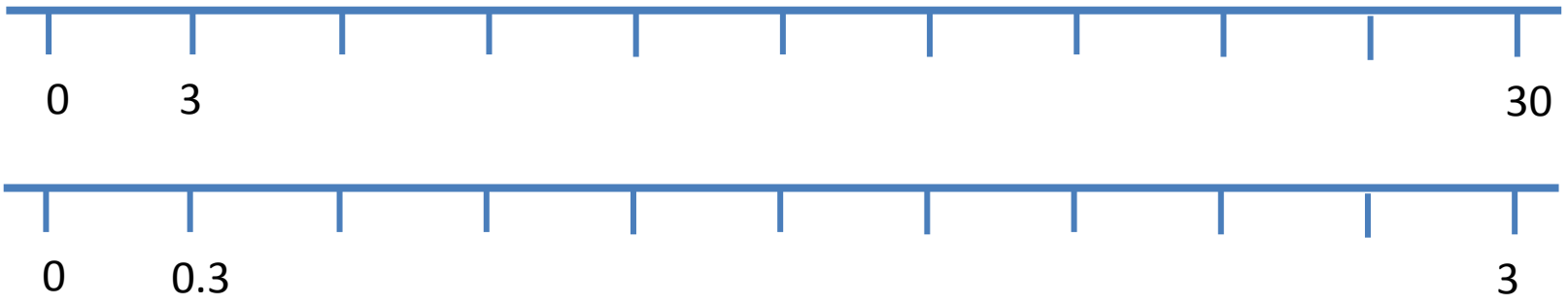
Multiples of 3, 0.3



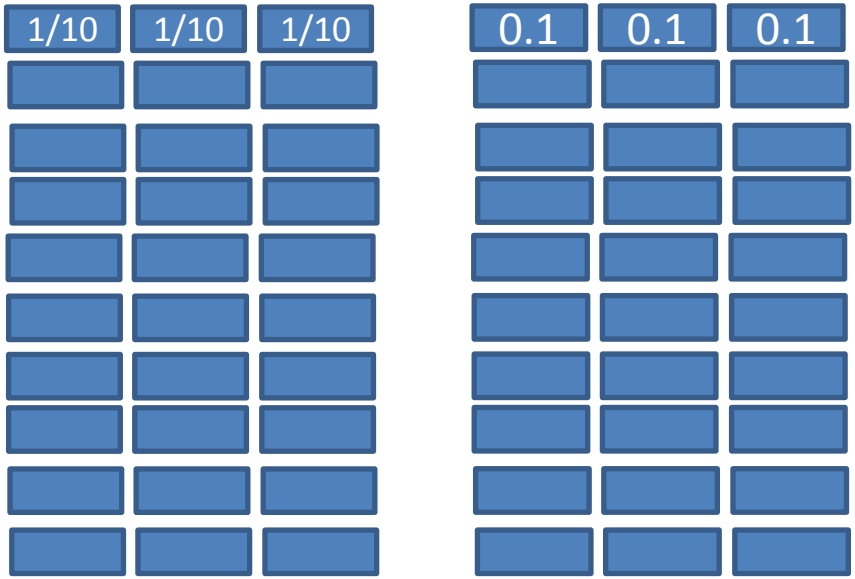


3 X1=
3 X2=
3 X3=
3 X4=
3 X5=
3 X6=
3 X7=
3 X8=
3 X9=
3 X10=

0.3 x1=
0.3 x2=
0.3 x3=
0.3 x4=
0.3 x5=
0.3 x6=
0.3 X7=
0.3 X8=
0.3 X9=
0.3 X10=

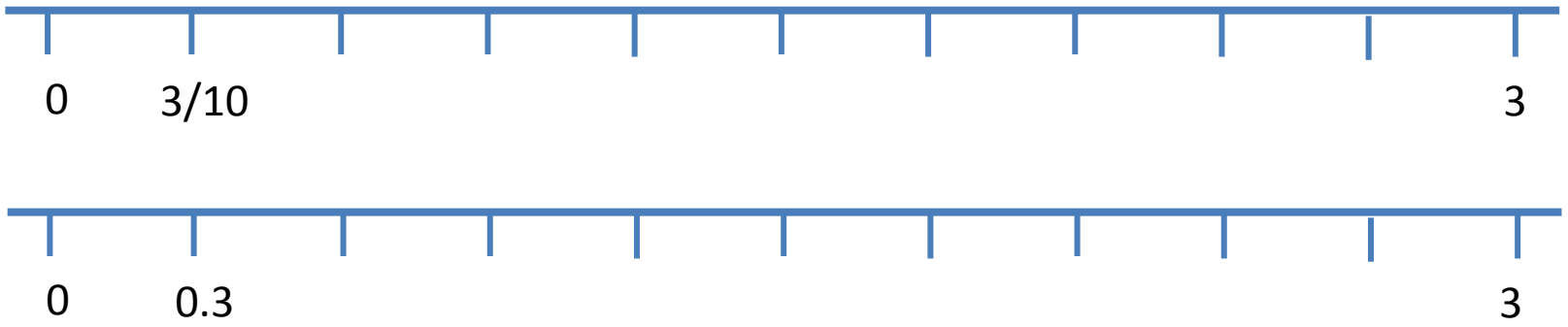


Multiples of 3/10, 0.3



3/10 X1=
3/10 X2=
3/10 X3=
3/10 X4=
3/10 X5=
3/10 X6= 18/10= $1\frac{8}{10}$
3/10 X7=
3/10 X8=
3/10 X9=
3/10 X10=

0.3 x1=
0.3 x2=
0.3 x3=
0.3 x4=
0.3 x5=
0.3 x6=
0.3 X7=
0.3 X8=
0.3 X9=
0.3 X10=



Dividing into groups of 0.3, 3

1.5 ÷ 0.3=
3÷ 0.3=

0.3 ÷ 0.3=
0.6 ÷ 0.3=

1.2 ÷ 0.3=
2.4 ÷ 0.3=

0.9÷ 0.3=
1.8 ÷ 0.3=

2.1÷ 0.3=
2.7 ÷ 0.3=

15 ÷ 3=
30 ÷ 3=

3 ÷ 3=
6 ÷ 3=

12 ÷ 3=
24 ÷ 3=

9÷ 3=
18 ÷ 3=

21÷ 3=
27 ÷ 3=

Dividing into groups of 0.3, 3, 30,

1.5 ÷ 0.3=
3÷ 0.3=

0.3 ÷ 0.3=
0.6 ÷ 0.3=

1.2 ÷ 0.3=
2.4 ÷ 0.3=

0.9÷ 0.3=
1.8 ÷ 0.3=

2.1÷ 0.3=
2.7 ÷ 0.3=

15 ÷ 3=
30 ÷ 3=

3 ÷ 3=
6 ÷ 3=

12 ÷ 3=
24 ÷ 3=

9÷ 3=
18 ÷ 3=

21÷ 3=
27 ÷ 3=

150 ÷ 30=
300 ÷ 30=

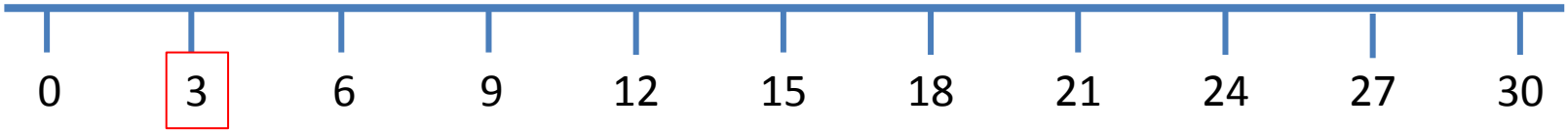
30 ÷ 30=
60 ÷ 30=

90 ÷ 30=
180 ÷ 30=

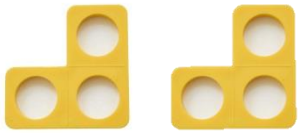
120÷ 30=
240 ÷ 30=

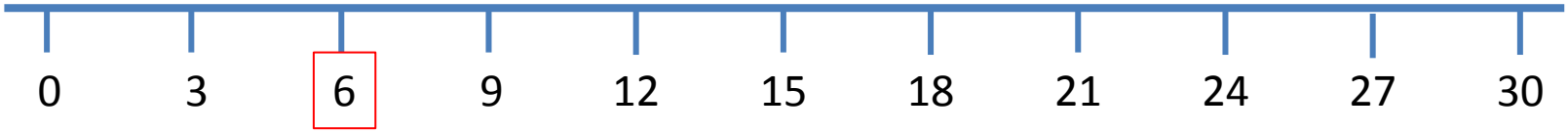
210 ÷ 30=
270 ÷ 30=

3 X 1 = 3

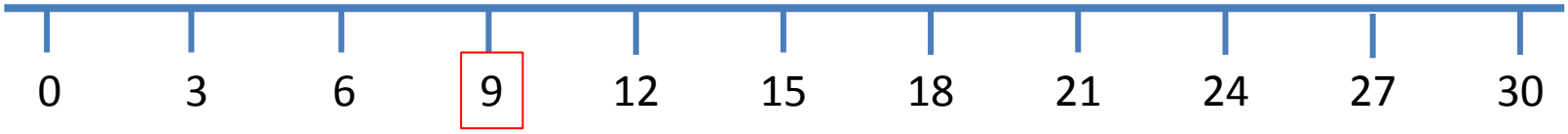


3 X 2 = 6

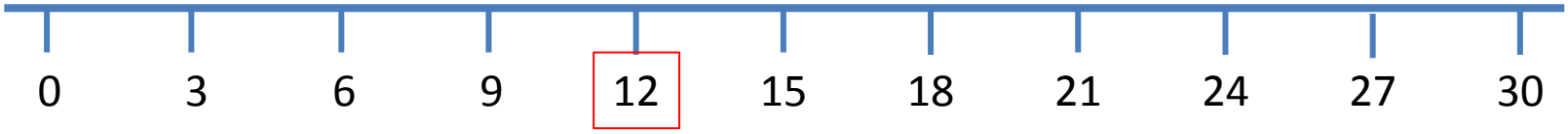




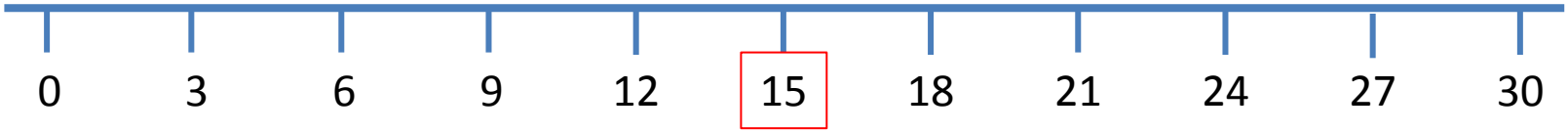
3 X 3 = 9



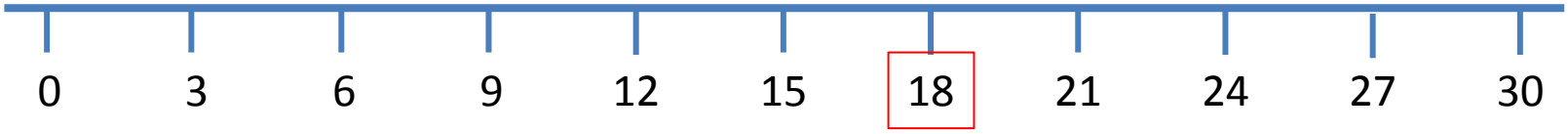
3 X 4 = 12



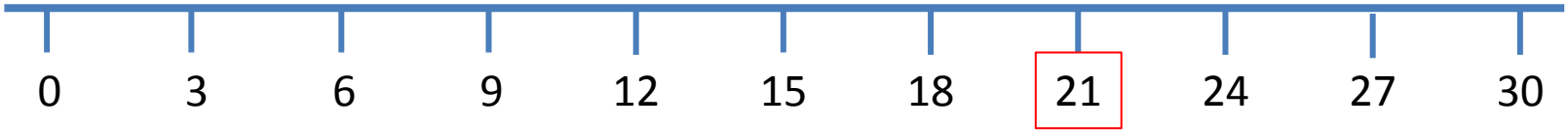
3 X 5 = 15



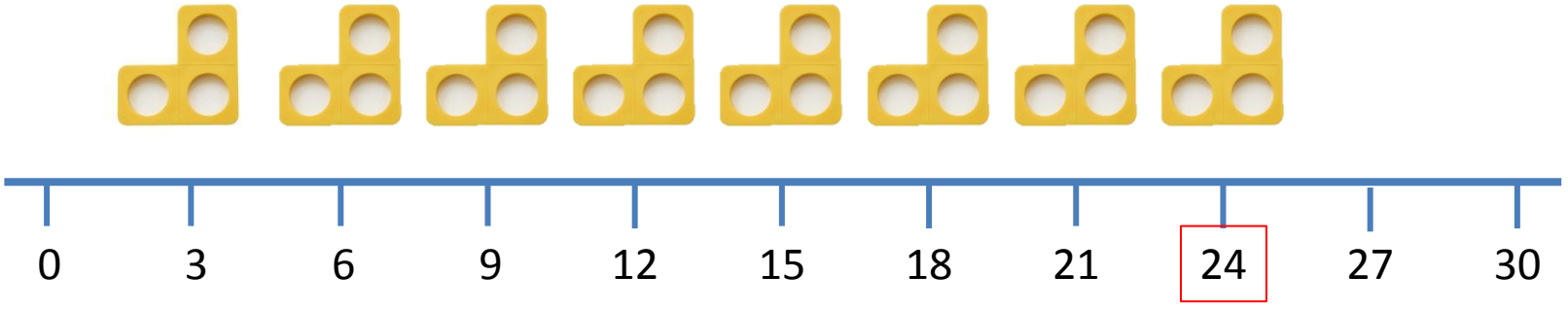
3 X 6 = 18



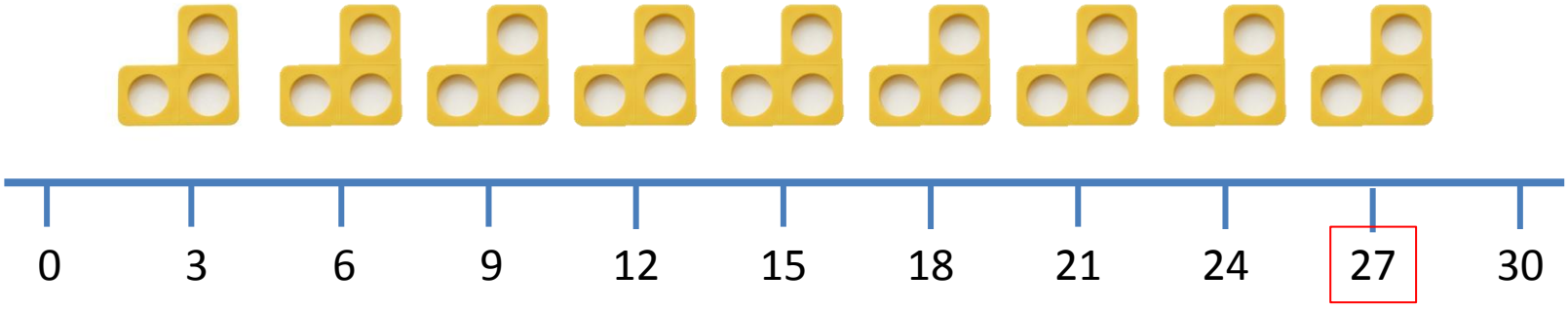
3 X 7 = 21



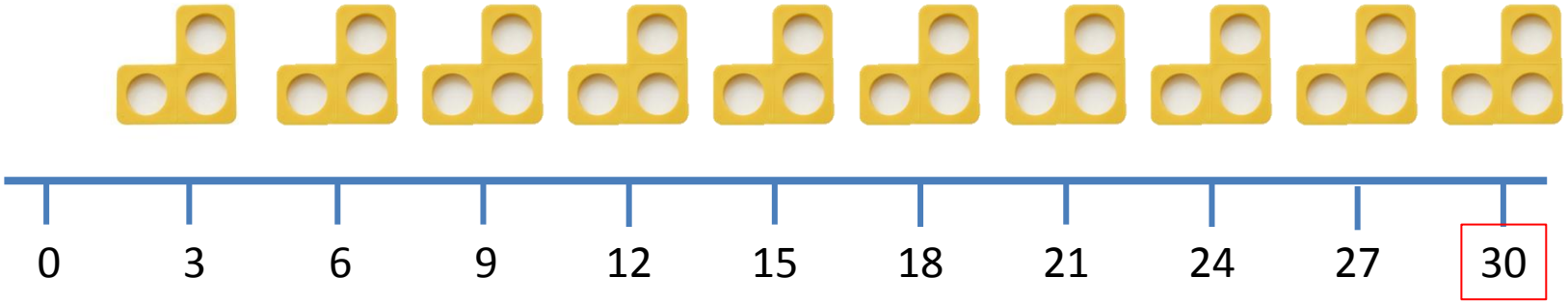
3 X 8 = 24



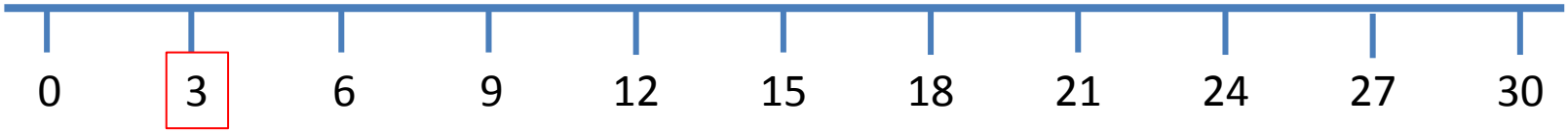
3 X 9 = 27



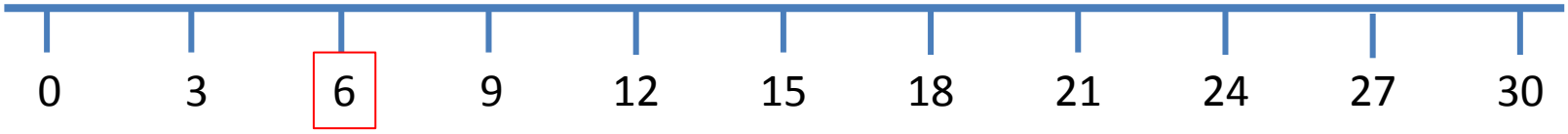
3 X 10 = 30



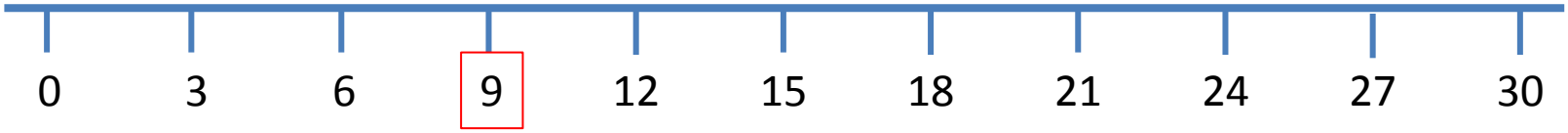
3 X 1 = 3



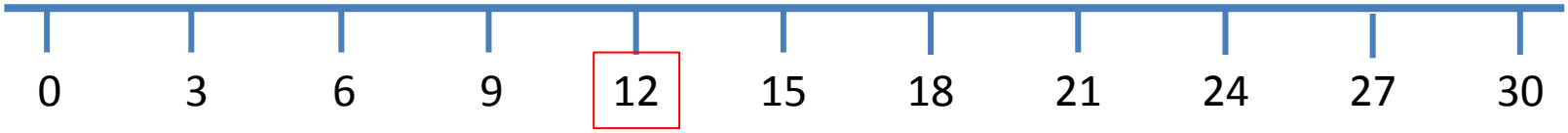
3 X 2 = 6



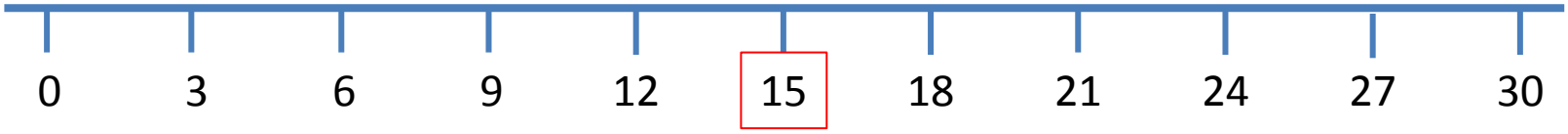
3 X 3 = 9



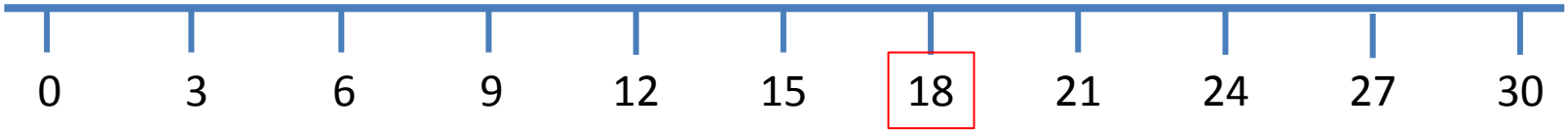
3 X 4 = 12



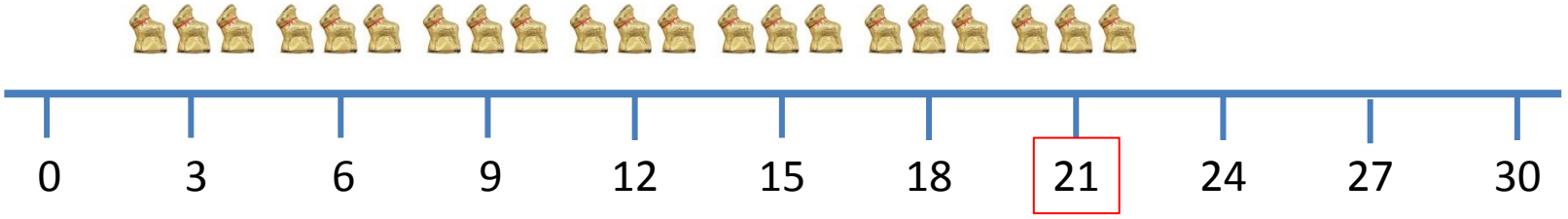
3 X 5 = 15



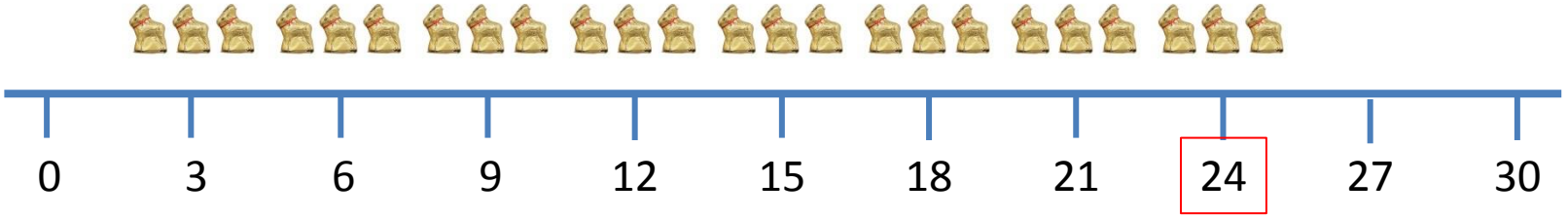
3 X 6 = 18



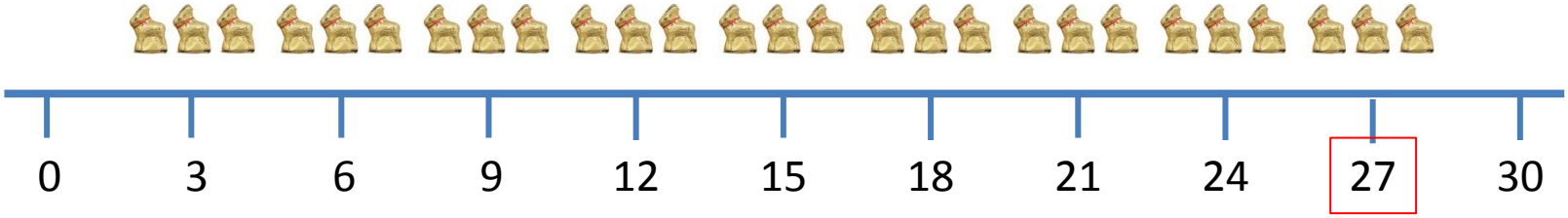
3 X 7 = 21



3 X 8 = 24



3 X 9 = 27



3 X 10 = 30